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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,945	07/12/2001	Tsukasa Takahashi	33798	1977
116	7590	02/13/2006	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			AMINZAY, SHAIMA Q	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/903,945	Applicant(s) TAKAHASHI ET AL.	
	Examiner Shaima Q. Aminzay	Art Unit 2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on November 14, 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Note: This office action has been restructured for clarity. Examiner did not change the ground of rejection; but has changed the argument of the rejection to reflect the new amendment.

Applicant's arguments filed November 14, 2005 have been fully considered.

1. Arguments with respect to the claims 1-3 and 6-8 under 35 U.S.C. 102(b)
Rejection is moot, amendment to the specification meets the requirements, therefor the rejection under 35 U.S.C 102(b) is withdrawn.
2. Applicant's arguments with respect to claims 1-10 under 35 U.S.C. 103(a)
Rejection has been fully considered, but they are not persuasive.

The applicant's argued features in the claims, i.e., providing "Martensson does not disclose an antenna attached to a first case such that the antenna diverges from the longitudinal direction of the case at an acute angle,, as recited in independent claims 1 and 6. Accordingly, Holshouser is relied upon in an attempt to make up for the deficiencies of Martensson. However, there is nothing within either Martensson or Holshouser that would have motivated one skilled in the art to make the proposed combination", and "as providing motivation for the

proposed combination, merely states that an object of the invention of Holshouser is to provide a *"more robust pivoting antenna configuration with improved signal performance and/or improved reliability over conventional radiotelephone models"*. There is nothing within either of these cited portions of Holshouser that discloses any benefit of positioning or pivoting the antenna to a position that diverges from the longitudinal direction of the telephone body at an acute angle" to be established read upon Martensson (Martensson, UK Patent Application No. GB 2,330,979) in view of Holshouser (Holshouser et al., U.S. Patent 6,249,688), and further in view of Tran (Tran, US Patent No. 6,215,454) as follows:

Martensson discloses a cellular radio telephone (portable radio device) comprises radio wave transmitting and receiving equipment, first and second case including an antenna that diverges from one of the portable radio device cases (*see for example, Figure 1*). Martensson does not specifically teach the antenna's divergence at an acute angle, however, Holshouser teaches the antenna diverges from the longitudinal direction of the case of the portable telephone at an acute angle that is any angle that is greater than zero and less than 90 degrees.

Martensson and Holshouser are analogous to the applicants teaching, that's why they do obviate.

Therefore, Examiner believes that including Holshouser's portable device antenna into Martensson's portable radio device provides robust mechanical

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connection between the antenna and the portable device body to eliminate the direct electrical path distortion, and to improve communications signal performance.

Further, Regarding claims 4 and 9, Martensson and Holshouser teach all the claimed limitations as recited in independent claims 1 and 6 (rejection bellow), Martensson and Holshouser do not specifically teach the receiver in the second case outputs sound, Tran teaches the second case receiver outputs sound.

Martensson, Holshouser, and Tran are analogous to the applicants teaching, that's why they do obviate.

Therefor, Examiner believes that including Tran's speaker with Holshouser portable device antenna and Martensson's portable radio device for the purposes of better ergonomics design and to provides robust mechanical connection between the antenna and the portable device body to eliminate the direct electrical path distortion, and to improve communications signal performance.

The rejection is maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martensson (Martensson, UK Patent Application No. GB 2,330,979) in view of Holshouser (Holshouser et al., U.S. Patent 6,249,688).

Regarding claim 1, Martensson teaches of a portable radio device having an antenna (Figure 1), comprising: a first case connected to the antenna such that the antenna diverges from the longitudinal direction of the case (*see for example, Figure 1 and page 5, lines 1 – 4, Figure 1 shows the first case connection to the antenna and the direction of the antenna diverges in an angle from the direction of the case*); and a second case which is connected to the first case and is made of metal or a material including metal (*see for example, Figure 1 and page 5, lines 1 – 4 and page 5, lines 8 –14, page 4, lines 6-13*), wherein the second case is located alongside the antenna when the portable radio device is used (*see for example, Figure 1 and page 5, lines 11 –14*).

Martensson does not specifically teach the antenna's divergence at an acute

angle, however, Martensson teaches the divergence of the antenna and the portable radio device (*see for example, Figure 1*).

In related art with portable foldable telephone (*see for example, column 1, lines 6-9*), Holshouser teaches the antenna diverges from the longitudinal direction of the case at an acute angle (*see for example, Figure 2, column 1, lines 56-65, column 2, lines 66-67, column 4, lines 28-52, the antenna (20) connected to the case (11) such that diverges from the longitudinal direction of the case (11) at an acute angle (greater than zero and less than 90 degrees)*).

It would have been obvious to one of ordinary skill in the art at the time invention was made to have included Holshouser's portable device antenna into Martensson's portable radio device to provide robust mechanical connection between the antenna and the portable device body to eliminate the direct electrical path distortion, and to improve communications signal performance (*Holshouser, column 1, lines 56-67, column 2, lines 66-67 continued to column 3, lines 1-3*).

Regarding claim 6, Martensson teaches of a portable radio device having an antenna (*Figure 1 and page 5, lines 1 – 4*), comprising: a first case connected to the antenna such that the antenna diverges from the longitudinal direction of the case (*see for example, Figure 1 and page 5, lines 1 – 4, Figure 1 shows the first case connection to the antenna and the direction of the antenna diverges in an angle from the direction of the case*); and a second case which is connected to

the first case, and is made of metal or a material including metal (see for example, *Figure 1 and page 5, lines 1 – 4 and page 5, lines 8 –14, page 4, lines 6-13*), wherein the second case is located between the antenna and a user when the portable radio device is used (see for example, *Figure 1 and page 5, lines 11 –14*).

Martensson does not specifically teach the antenna's divergence at an acute angle, however, Martensson teaches the divergence of the antenna and the portable radio device (see for example, *Figure 1*).

In related art with portable foldable telephone (see for example, *column 1, lines 6-9*), Holshouser teaches the antenna diverges from the longitudinal direction of the case at an acute angle (see for example, *Figure 2, column 1, lines 56-65, column 2, lines 66-67, column 4, lines 28-52, the antenna (20) connected to the case (11) such that diverges from the longitudinal direction of the case (11) at an acute angle (greater than zero and less than 90 degrees)*).

It would have been obvious to one of ordinary skill in the art at the time invention was made to have included Holshouser's portable device antenna into Martensson's portable radio device to provide robust mechanical connection between the antenna and the portable device body to eliminate the direct electrical path distortion, and to improve communications signal performance (*Holshouser, column 1, lines 56-67, column 2, lines 66-67 continued to column 3, lines 1-3*).

Regarding claims 2 and 7, Martensson in view of Holshouser teach all the claimed limitations as recited in claim 1 and 6. Martensson teaches of further comprising a hinge portion for rotatably connecting the first and second cases to each other (page 5, lines 8–10 and page 5, lines 16 – 19), wherein the first and second cases rotate about the hinge portion and stop at a predetermined angle that is smaller than 180 degrees when the portable radio device is used (Figure 1 and page 5, lines 16 – 20).

Regarding claims 3 and 8, Martensson in view of Holshouser teach all the claimed limitations as recited in claims 2 and 7. Martensson further teaches of wherein the first case is a main body case in which a main substrate of a portable radio device is housed (Figure 1 and page 5, lines 1 –6), and the second case is a cover case of the main body case (Figure 1 and page 5, lines 11 – 14).

4. Claims 4-5, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martensson (Martensson, UK Patent Application No. GB 2,330,979) in view of Holshouser (Holshouser et al., U.S. Patent 6,249,688), and in view of Tran (Tran, US Patent No. 6,215,454).

Regarding claims 4 and 9, Martensson in view of Holshouser teach all the claimed limitations as recited in claims 1 and 6. Martensson in view of Holshouser do not teach of wherein the second case includes a receiver portion

that outputs sound.

In a related art dealing with antenna shielding in mobile communications devices, Tran teaches of wherein the second case includes a receiver portion that outputs sound (*Figures 1B and 2A and column 7, lines 1 – 7 and column 6, lines 44 –51*).

It would have been obvious to one skilled in the art at the time of invention to have included into Martensson and Holshousers' folding cover, Tran's speaker, for the purposes better ergonomics design, as taught by Tran.

Regarding claims 5 and 10, Martensson in view of Holshouser teach all the claimed limitations as recited in claims 1 and 6. Martensson in view of Holshouser do not specifically teach of wherein the antenna includes a whip antenna that can be pulled out.

In a related art dealing with antenna shielding in mobile communications devices, Tran teaches of wherein the antenna includes a whip antenna that can be pulled out (*Figures 1B and 2A and column 6, lines 57 –68*).

It would have been obvious to one skilled in the art at the time of invention to have included into Martensson and Holshousers' folding cover antenna system, Tran's retractable antenna and shielding system, for the purposes of creating a compact antenna structure that possesses the desired radiation characteristics that is able to be mounted on a wireless device and further providing some shielding when an antenna is not extended, as taught by Tran.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaima Q. Aminzay whose telephone number is 571-272-7874. The examiner can normally be reached on 7:00 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EDAN ORGAD
PATENT EXAMINER/TELECOMM.

EP 2/6/06

Shaima Q. Aminzay

Shaima Q. Aminzay
(Examiner)

Nay A. Maung
(SPE)
Art Unit 2684

February 4, 2006